

American Pale Ale 10.5

- Gravity **11.2 BLG**
- ABV **4.5 %**
- IBU **50**
- SRM **4.4**
- Style **American Pale Ale**

Batch size

- Expected quantity of finished beer **10.5 liter(s)**
- Trub loss **5 %**
- Size with trub loss **11 liter(s)**
- Boil time **70 min**
- Evaporation rate **10 %/h**
- Boil size **13.5 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **7.1 liter(s)**
- Total mash volume **9.4 liter(s)**

Steps

- Temp **66 C**, Time **70 min**
- Temp **78 C**, Time **10 min**

Mash step by step

- Heat up **7.1 liter(s)** of strike water to **73.6C**
- Add grains
- Keep mash **70 min** at **66C**
- Keep mash **10 min** at **78C**
- Sparge using **8.8 liter(s)** of **76C** water or to achieve **13.5 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Viking Pale Ale malt	1.75 kg (74.5%)	80 %	5
Grain	Viking Vienna Malt	0.5 kg (21.3%)	79 %	7
Grain	Karmelowy Jasny 30EBC	0.1 kg (4.3%)	75 %	30

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Columbus/Tomahawk/Zeus	12.5 g	60 min	15.5 %
Boil	Cascade	7.5 g	15 min	6 %
Boil	Cascade	10 g	5 min	6 %
Aroma (end of boil)	Cascade	7.5 g	0 min	6 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	5.75 g	Fermentis